

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of sharing a program using target board identifications (IDs) in a mobile communication system, comprising the steps of:

executing by a main processor a shared execution file for a plurality of target boards in the system when power is supplied to the system, said main processor apart from said plurality of target boards;

reading by the main processor a target board ID of each target board;

initializing by the main processor target board hardware according to the target board ID;

initializing by the main processor an operating system (OS) for each target board using the target board ID; and

branching by the main processor into a sub-routine for each target board according to the target board ID and executing by the main processor an application program for the target board.

2. (Original) The method of claim 1, wherein the OS initialization varies according to the hardware structure and running conditions of each target board.

3. (Original) The method of claim 1, wherein an application program for each target board according to the function of the target board is stored as part of a single master application program and executed in the application execution step.

4. (Original) The method of claim 1, wherein common functions of the target boards are incorporated into the shared execution file.

5. (Original) The method of claim 1, wherein different functions of the target boards are implemented in branch sub-routines according to the target board IDs.

6. (Currently Amended) A method of sharing a program in a mobile communication system, comprising the steps of:

storing by a main processor a master execution file in a memory, said master execution file compiled to contain program code to operate a plurality of target boards of the mobile communication system, said main processor apart from said plurality of target boards;

executing by the main processor the master execution file for the plurality of target boards in the system when power is supplied to the system;

reading by the main processor a target board identification (ID) of each target board;

initializing by the main processor target board hardware according to the target board ID and the master execution file;

initializing by the main processor an operating system (OS) for each target board using the target board ID and master execution file; and

branching by the main processor into a sub-routine for each target board according to the target board ID and executing by the main processor an application program of the master execution file for each target board.

7. (Original) The method of claim 6, wherein the OS initialization varies according to the hardware structure and running conditions of each target board.

8. (Original) The method of claim 6, wherein an application program is compiled into the master execution file for each target board according to the function of the target board and executed in the application execution step.

9. (Original) The method of claim 6, wherein common functions of the target boards are incorporated into the master execution file.

10. (Original) The method of claim 6, wherein different functions of the target boards are implemented according to the target board IDs in branch sub-routines of the master execution file.

11. (Original) A system for sharing a program in a mobile communications system having a control unit and a plurality of target boards, comprising:

wherein the control unit stores an execution file compiled to contain program code to operate each of the plurality of target boards.

12. (Original) The system for sharing a program in a mobile communications system of claim 11, wherein each of the plurality of target boards is assigned an identification (ID) code that the control unit reads and executes subroutines of the execution file according to the ID code of the target board.